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STS Consultants, Ltd.
Solutions through Science & Engineering

January 8, 2002

Mr. David Carlins
Magellan Development Group, Ltd.
One West Superior, Suite 200
Chicago, Illinois 60610

Mr. Sean W. Bezark Esq.
Altheimer and Gray
10 South Wacker Drive
Chicago, Illinois 60606-7482

RE: Test Pit Exploration, 26-Acre Golf Course Site, Southwest Corner of Wacker Drive and Lake Shore Drive, Chicago, Illinois – STS Project No. 1-32193-YH

Dear Mr. Carlins and Mr. Bezark:

In accordance with our proposal of December 6, 2001 (STS Proposal No. 1-14892-PP), STS Consultants, Ltd. (STS) has completed test pit explorations at the above-referenced site. The objective of that work was to identify the approximate ground surface elevation of the site during the time the area was in use as a freight yard in the early part of the 1900s. That information is to be used to specify the areas to be drilled and the depth of exploration for areas where fill soil is present over the ground surface from the early 1900s. The fill thickness is to be determined in order to identify areas where fill thicker than two feet may be present. Former exploration of the site for elevated gamma radiation identified several locations with evidence of elevated radioactivity. That survey, however, would not detect radioactivity beneath a soil cover of more than two feet. Areas with fill greater than two feet will be explored through subsurface survey methods.

TEST PIT EXPLORATION LOCATIONS

Historical records of the site were reviewed to locate potential targets for identifying the former ground surface. Six locations for test pits were proposed, and five were subsequently excavated. The proposed locations were as follows:

Location A	Former railroad tracks adjacent to a scale house and Slip C, in the northwest part of the site.
Location B	Building foundation/floor slab of former cold storage warehouse near west end, south side of Slip D.
Location C	Brick pavement and south edge of Slip D immediately north of cold storage warehouses.
Location D	Paved driveway and former railroad tracks between cold storage warehouses and coal storage yard, north of Slip E. (Note: this location was not excavated due to interferences with irrigation system and location on tee area.)
Location E	Edge of slip at west end of Slip E.
Location F	Railroad tracks and canal edge of projected extension of Slip C.

These test pit locations are based on land use depicted on Sanborn Fire Insurance Maps dated 1906. Additionally, an elevation survey in approximately 1971 of the Illinois Central rail yard was reviewed

by International Engineering Consultants. The rail yard elevation was reported to be approximately 7.1 feet Chicago City Datum (CCD).

Elevations from the test pit exploration results, discussed below, and from the railroad yard map were standardized to CCD elevations before developing the fill thickness map. Figure 1 shows the locations of the test pits on the current site. Figures 2a and 2b show the test pit locations superimposed on the Sanborn Fire Insurance Map from 1906.

TEST PIT FINDINGS

Location A

A thin cinder fill cover 12 to 18 inches thick was found, being somewhat thicker to the west. Timbers were found running north-south, possibly reflecting cribbing for the scale pit. Below the cinders was fine brown sand, apparently natural beach sand. No evidence of rail bed ballast, ties, or rails was noted in the test pit.

The ground surface elevation in this area is approximately 5.4 feet CCD. The base of the cinders was encountered at an elevation of 4.3 feet CCD. The former ground surface was not evident in this test pit.

Location B

The excavation encountered concrete with re-bar immediately below the ground surface. The north edge of the concrete is covered by cinder fill approximately 16 inches thick. Beneath the cinder fill a mixture of fine sand and cinders was encountered. The cinder fill is only a few inches thick over the sand.

The ground surface elevation in this area is 5.9 feet CCD. The bottom of the cinders was encountered at elevations of approximately 5.7 to 5.8 feet CCD. The thick cinder fill and presence of the concrete foundation at the ground surface suggests the former ground elevation was at or above approximately the current elevation of approximately 6.0 feet CCD.

Location C

This test pit was excavated to locate a brick pavement along the south edge of Slip D. Paving bricks were found in the upper 18 inches of the trench. These bricks are not in place but had been torn up and mixed with other materials. Below the material containing the bricks, cinder fill and rubble was encountered. Beneath the cinder fill a layer of what appeared to be an asphalt type pavement over a limestone basecourse was encountered. Pink common brick rubble was encountered beneath the asphalt and limestone.

Ground surface at the location of the test pit is 7.2 feet CCD. The elevation of the asphalt surface is 5.7 feet CCD. The elevation of the brick pavement is thus placed at between 6.0 and 7.0 feet CCD.

Location D

Location was not excavated.

Location E

This test pit was excavated at the west end of Slip E. Approximately 12 inches of mixed cinders and soil was found over a wooden structure. The wood appeared to be timbers rather than ties. The timbers are oriented both north-south and east-west. To the east, the test pit encountered fill soil and debris, with

little or no timber or wood. West of the timbers, the fill consists of more brick and cinders. It appears the timber comprised a floor or decking and a wall at the west end of the slip.

The ground surface elevation at this test pit is 7.1 feet CCD. The elevation of the top of the timbers is approximately 6.3 feet CCD. This indicates the former ground surface was between 6.0 and 7.0 feet CCD at the edge of Slip E.

Location F

This test pit was excavated near a ridge of fill protecting a lighting fixture. The upper approximately two to three feet was rubble fill placed to form the protective ridge. This fill was underlain by cinder fill 12 to 18 inches thick. At that depth a wood timber was encountered. Miscellaneous fill with some staining was evident on the east side of the wood beam. A uniform gray silt fill soil was evident to the west of the timber. The material is interpreted such that the gray silt is fill from the former southern extension of Slip C. The miscellaneous fill material is on the land side of the slip wall.

The current ground surface at this location is 7.1 feet CCD. The elevation of the timber is 3.7 feet CCD. The slip wall is possibly lower as it had been filled in prior to the 1900s and is not representative of the ground elevation at that time. The cinder fill probably represents the former ground surface, but no distinct marker is evident below the more recent fill at an elevation of 4 to 5 feet CCD.

CONCLUSIONS

On the basis of these test pits, the best indications of the ground surface elevations suggest an early 1900s elevation of between 6.0 and 7.0 feet CCD. This agrees fairly well with the topography from the railyards in the 1970s with an elevation of approximately 7.0 feet CCD. In order to provide some level of conservatism based on the uncertainty of the data, STS has assumed that the lower elevation of the ground surface was 6.0 feet CCD.

On the basis of the shielding provided by soil over two feet thick, any fill at an elevation of greater than 8.0 feet CCD will be assumed sufficiently thick to potentially mask underlying radioactive material that could not be detected through a surface gamma survey.

We appreciate being of assistance on this project. Please contact the undersigned with any questions you may have regarding this matter.

Regards,

STS CONSULTANTS, LTD.

Stephen G. Torres, C.P.G.
Science Group Manager

Richard G. Berggreen, C.P.G.
Principal Geologist

cc: James King, LaSalle National Bank
Fred Micke, USEPA

Attachments — Larry has the maps
Tam

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